

What is claimed is:

1. An optical fiber probe comprising:
an optical fiber;
a first protective pipe holding the optical fiber therein for protection; and
a collet attached to a front part of the first protective pipe;
wherein an adhesive is filled in a base part of the first protective pipe to form a sealing plug.
2. The optical fiber probe according to claim 1, wherein the optical fiber is able to extend relative to the collet.
3. The optical fiber probe according to claim 1 further comprising a second protective pipe covering the optical fiber and fitted in the first protective pipe.
4. The optical fiber probe according to claim 1, wherein the first protective pipe is formed in a length such that the base part of the first protective pipe is cooled by natural cooling at temperatures nearly equal to an ordinary temperature.